

IN THE CLAIMS:

Kindly amend claims 1 and 7-14, as shown in the following listing of claims which replaces all previous versions and listings of claims.

1. (currently amended) An end face polishing device for polishing an end face of a workpiece, comprising: a driving unit having a first revolution shaft mounted for undergoing revolving movement about a first axis, a rotational shaft mounted for undergoing rotation about a second axis eccentric from the first axis, and a second revolution shaft mounted for undergoing revolving movement about a third axis eccentric from the second axis; a polishing sheet having a polishing surface and connected to the first revolution shaft, the rotational shaft, and the second revolution shaft of the driving unit for undergoing corresponding revolving and rotational movement therewith; and a driving unit for driving the polishing sheet to impart a roulette-like motion to the polishing sheet while rotating the polishing sheet about a rotational axis; and a pressing unit for pressing a workpiece during revolving and rotational movement driving of the polishing sheet by the driving unit to bring an end face of the workpiece into pressure contact with the polishing surface so that the polishing surface lies in a plane parallel to the

end face of the workpiece to thereby polish the end face of the workpiece.

2. (previously presented) An end face polishing device comprising: a first revolution shaft mounted for undergoing revolving movement about a first axis; a rotational shaft mounted for undergoing rotation about a second axis eccentric from the first axis; a second revolution shaft mounted for undergoing revolving movement about a third axis eccentric from the second axis; and a polishing disc connected to the second revolution shaft for revolving movement therewith.

3. (previously presented) An end face polishing device according to claim 2; further comprising a frame for connecting an elastic body to a surface of the polishing disc; and wherein the second revolution shaft has an internal gear connected to the frame, a first transfer gear engaging the internal gear, a rotational member having a second transfer gear disposed opposite to the first transfer gear, and an external gear engaging the second transfer gear.

4. (previously presented) An end face polishing device according to claim 3; wherein the first revolution shaft is connected to a motor through a first timing belt.

5. (previously presented) An end face polishing device according to claim 4; wherein the rotational shaft is connected to the motor through a second timing belt.

6. (previously presented) An end face polishing device according to claim 2; further comprising an ultrasonic actuator contacting an external circumference portion of the first revolution shaft for rotationally driving the rotational shaft.

7. (currently amended) A method for polishing an end face of a workpiece, comprising the steps of: providing a polishing sheet having a polishing surface; driving the polishing sheet to impart a preselected motion to the polishing sheet by imparting revolving movement thereto about a first axis, to impart rotation thereto about a second axis eccentric from the first axis, and to impart revolving movement thereto about a third axis eccentric from the second axis; a roulette-like motion to the polishing sheet while rotating the polishing sheet about a rotational axis; and pressing a workpiece during driving of the polishing sheet to bring an end face of the workpiece into pressure contact with the polishing surface so that the polishing surface lies in a plane parallel to the end face of the workpiece to thereby polish the end face of the workpiece.

8. (currently amended) A method according to claim 7; wherein the roulette-like preselected motion comprises a motion generally in the form of a cycloid.

9. (currently amended) A method according to claim 7; wherein the roulette-like preselected motion comprises a motion generally in the form of an internal cycloid.

10. (currently amended) A method according to claim 7; wherein the roulette-like preselected motion comprises a motion generally in the form of an external cycloid.

11. (currently amended) A method according to claim 7; wherein the roulette-like preselected motion comprises a motion generally in the form of a trochoid inscribed in a first circle and drawn by a point fixed on a second circle smaller in diameter than the first circle.

12. (currently amended) A method according to claim 7; wherein the roulette-like preselected motion comprises a motion generally in the form of an internal trochoid inscribed in a first circle and drawn by a point fixed in a second circle smaller in diameter than the first circle.

13. (currently amended) A method according to claim 7; wherein the roulette-like preselected motion comprises a motion generally in the form of an external trochoid inscribed

in a first circle and drawn by a point fixed outside of a second circle smaller in diameter than the first circle.

14. (previously presented) A method according to claim 7; wherein the driving step includes the step of driving the polishing sheet using an XY movement table.

15. (previously presented) A method according to claim 7; wherein the driving step includes the step of driving the polishing sheet with a variable driving speed.